Motivating doctors into leadership and management: a cross-sectional survey

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Abstract: Purpose: Calls for doctors to enter management are louder as the benefits of medical leadership become clearer. But supply is not meeting demand. This study asks doctors (physicians): what might encourage you to go into leadership, and what are the disincentives? The same was asked about leadership training. First, the paper attempts to understand doctors' motivation to lead, specifically, to explore the job characteristics that might act as incentives and disincentives. Second, the study points to organisational obstacles that further shrink the medical leadership pipeline. Method: Doctors were surveyed through the Organization of Danish Medical Societies. Our key variables included: 1) the incentives and disincentives for doctors of going into leadership and management; 2) the motivation to participate in leadership training. Our sample of 3534 doctors (17% response) is representative of the population of doctors in Denmark. Findings: The main reason why doctors are motived towards leadership is to make a difference. They are put off by fears of extra administration, longer hours, burnout, lack of resources, and by organisational cultures resistant to change. But doctors are aware of their need for leadership development, prior to entering management. Practical implications: Health systems should adapt to reflect the motivations and incentives of their potential medical and clinical leaders to improve their succession planning. Appropriate leadership training is also essential. These changes are especially important now. Medical leadership has been linked positively to organisational and patient outcomes and has been central in responding to the COVID-19 pandemic. Stress and burnout among clinical staff continue to rise, and health systems face recruitment and retention challenges.

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Motivating doctors into leadership and management: a cross-sectional survey

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Abstract

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Calls for doctors to enter management are louder as the benefits of medical leadership become clearer. But supply is not meeting demand. This study asks doctors (physicians): what might encourage you to go into leadership, and what are the disincentives? The same was asked about leadership training. First, the paper attempts to understand doctors' motivation to lead, specifically, to explore the job characteristics that might act as incentives and disincentives. Second, the study points to organisational obstacles that further shrink the medical leadership pipeline.

Method:

Doctors were surveyed through the Organization of Danish Medical Societies. Our key variables included: 1) the incentives and disincentives for doctors of going into leadership and management; 2) the motivation to participate in leadership training. Our sample of 3534 doctors (17% response) is representative of the population of doctors in Denmark.

Findings:

The main reason why doctors are motived towards leadership is to make a difference. They are put off by fears of extra administration, longer hours, burnout, lack of resources, and by organisational cultures resistant to change. But doctors are aware of their need for leadership development, prior to entering management.

Practical implications:

Health systems should adapt to reflect the motivations and incentives of their potential medical and clinical leaders to improve their succession planning. Appropriate leadership training is also essential. These changes are especially important now. Medical leadership has been linked positively to organisational and patient outcomes and has been central in responding to the COVID-19 pandemic. Stress and burnout among clinical staff continue to rise, and health systems face recruitment and retention challenges.

Introduction

Appeals for doctors to enter leadership and management positions have become louder, as the evidence pointing to the benefits becomes clearer. A growing number of studies show that clinical leadership is associated with better organisational and patient outcomes [1-5]. Despite calls to action, a common complaint is that the supply of medical leaders and managers (terms we use interchangeably) is not matching the demand; doctors have demonstrated a reluctance to leave their clinical work for department headships or C-Suite responsibilities. Key reasons include: commitment to medical practice or research, the challenging and siloed nature of health care, increased work pressure and fear of burnout, individualised career advancement that regards clinical and/or academic skills over leadership competence and collective progress, few leadership training opportunities, and a general fear of "going to the dark side" [6-14].

When doctors (physicians) move into leadership positions, they also experience conflicts between their identities as professional *and* manager [15-17]. In addition to the extra responsibilities, when taking on leadership roles, many doctors also report identity conflict, a perceived negative hit to their credibility, and a decrease in job satisfaction derived from their clinical work [18]. A recent report by the Danish Commission on Leadership and Management (DCLM) highlights the benefits to the performance of public managers when they have a strong leadership identity. The DCLM found that among all public managers, doctors are the least likely to associate with their identity as a leader [19].

Our study surveyed doctors in Denmark to try to understand their attitudes about being a leader or manager, and factors that influence their willingness to take on these positions, which addresses a "crucial" need raised by previous authors [20]. We investigated whether they would consider taking a management position, and if not, why. Further, we assessed doctors' motivation to undertake leadership training – a helpful precursor in the process, which is known to have a positive impact on leadership ability and patient outcomes [21]. The aim of the paper was twofold. First, it attempts to understand doctors' motivation to lead, specifically, to explore the job characteristics that might act as incentives and disincentives. Second, the study points to potential organisational impediments, factors that may further reduce the pipeline of medical leaders. We suggest that the low supply of medical leaders globally may partially result from a failure of health organisations to fully understand the motivations of their doctors.

Methods

The Organization of Danish Medical Societies (LVS) invited its 21,000 medical members to complete an on-line survey questionnaire (using Qualtrics). The initial e-mail was sent on December 11th, 2018, with reminder e-mails sent on December 19th, 2018 and January 3rd, 2019. Respondents were told only that the survey concerned their life as a doctor in the Danish health system; there was no mention of leadership or management. Answers to the survey were fully anonymous and could not be traced back to individual participants.

We collected the demographic variables of age, gender, clinical specialty, and job position (see Table 1 for descriptive statistics). Our key variables included: 1) the incentives for going into leadership or management roles; 2) the disincentives to do so; and 3) the incentives for participating in leadership training. We elicited the incentives and disincentives via lists of possible job characteristics (many identified via a small pilot study with 60 European cardiologists) that were presented to respondents in randomised order; participants could tick *as many as applied to them*. We also asked about willingness to take on a leadership position which was assessed with the question, "Would you ever consider taking a management or leadership position in your career?" Respondents selected one of the following seven options: 1) Yes; 2) Yes and I am currently in one; 3) Yes and I was previously in one; 4) No; 5) No and I am currently in one; 6) No and I was previously in one; 7) Other. The full wording of the questions and response options are presented in the tables in the results section (Tables 2 – 4).

Our study uses fully completed surveys only and includes respondents aged between 24 and 70 years (as above this age leadership is less likely), thereby excluding roughly 4 percentage points of the population (N=912). The main results are presented in Tables 2 to 4. In the supplementary material, we include three tables (A1 – A3) that break the results down by respondents' clinical position (e.g. registrar/intern, consultant, head of unit), another three (B1 – B3) that list the results for gender and age groups, and finally three (C1 – C3) that contain results for different specialties. This allows for a greater depth of understanding at the different career levels, age groups, specialties, and for different genders. The analyses are conducted in Stata 14.2.

Results

Our final sample contains 3,534 observations (doctors), a response rate of 17%. A key issue is whether the sample is statistically representative of Danish doctors. We therefore compared

our sample demographics (age, gender, speciality) to that of the population of Danish doctors: we can confirm that our sample is statistically representative.

The share of females in our sample is 0.50, and in the whole population of doctors in Denmark it is 0.51, thus there is no statistical difference according to a binomial test (p=0.30). The average age in our sample is 49 years, compared to the population with 51 years; we imposed an upper age limit of 70 years in our sample which is why our mean age is slightly lower. We found no statistical differences in medical speciality. Our sample contains similar shares for "gynaecology and obstetrics" and "psychiatry", and slightly higher shares for anaesthesiology and acute medicine (10.0% vs. 7.8%), medical specialties (24.0% vs. 21.6%), paediatrics (4.4% vs. 3.5%), and service specialties (8.1% vs. 6.6%); and slightly lower shares for family medicine (19.9% vs. 24.9%) and surgical specialties (19.8% vs. 22.6%).

Of note, given the evidence and growing calls for doctors to step up into leadership [1-5], we found that 69% (n=2,446) of respondents replied positively when asked whether they would consider taking a management or leadership position in their career. Interestingly, more than half (n=1,548) had no previous management experience. Women were more interested in leadership positions (72%) than men (67%) according to a Chi-squared test.

Table 2 presents a summary of the job characteristics and incentives that doctors report could positively motivate them to consider agreeing to a leadership or management position. The main reason reported, by considerable margin, is the possibility of having a positive impact (true for 75% of respondents, and more so for women with 78% agreement than men with 71%, but less so for doctors in Family medicine with 65%). This seems to be an important finding: that most doctors want to go into management and leadership to make a difference. However, extrinsic factors are not completely absent; earning more money was the third most common response at 37% (more often given by men with 40% than women with 33%).

Being prepared for management by undertaking leadership training was viewed as important by 42% of doctors who responded, the second most common reason – a result that is largely driven by the women, for 51% of whom (vs. 34% of men), this incentive applied. The importance of training is unsurprising since few doctors receive any formal leadership development [22]. Duty and a feeling of obligation ranked fourth (35%) and applies particularly to doctors in psychiatry (43%) or service specialties (41%), while a quarter (24%)

of respondents indicated that they would consider a leadership position if they were able to job-share – a result again driven by female doctors (30%) rather than male doctors (17%). Twenty-two per cent of doctors would consider moving into a management role to prevent someone inappropriate from taking it, which seems to be especially relevant in psychiatry (31%), and approximately the same number would consider it if they were freed from other responsibilities (e.g. admin). In Table A1 in the appendix, we present findings by clinical position, in Table B1 by gender and age groups, and in Table C1 by specialty.

Table 3 presents the job characteristics and *dis*incentives that deter doctors from going into leadership and management. The three most commonly-reported disincentives are that it would take focus away from their clinical work and relationships with patients (51%, which especially holds for paediatrics, anaesthesiology and acute medicine), which is the main source of self-identity, credibility, and sense of meaning for many doctors [18]. Additional disincentives include increased administration and the requirement to attend more meetings (49%), and lengthening work hours, which may also cause more stress (48%). The latter disincentive is more relevant for women (54%) than men (42%). Perceiving a lack of resources to support them in the role appears also to be a concern (39%), and this may directly equate with the most common reason *for* taking on a management position – to have a positive impact. Burnout, or fear of it, was reported by over a third (36%), and more so for women (41%) than men (31%).

Being in an organisation with a culture that is resistant to change was identified by a quarter of reporting doctors; doctors in family medicine did not perceive this to be a problem (10.3%), as they mostly work in places with greater autonomy. The remaining four most common concerns largely represent personal factors, such as involving conflicts with, and having to manage, difficult colleagues (23%), doctors' feeling that they lack leadership skills (20%), which women report much more often (26% vs. 14%), inadequate additional pay (20%), mentioned by men (26%) more than women (14%), and not being senior enough or having adequate previous experience (17%). Table A2 in the appendix presents respondents' leadership disincentives by job position, Table B2 contains the disincentives by gender and age group, and Table C2 provides the results by clinical specialty.

Doctors expressed feeling inadequately prepared for management and leadership. Undertaking leadership development was the second most common response when doctors were asked what job characteristics would incentivise them into a leader or manager role (Table 2). It is therefore

helpful to try to understand doctors' motivations with regards to doing this type of training. Our sample was asked, "If your institution, or head of department, wanted you to take a leadership training programme, what incentives might motivate you to take one?" Table 4 presents this information.

The overwhelming majority of respondents stated that personal development was their key motive (73%), with 78% of women and 70% of men identifying this reason. This incentive was most often selected by paediatricians (84%), and least often by psychiatrists (67%). Second is an increase in salary (36%), which is followed by the more likely possibility of receiving extra time in lieu for clinical and/or research work (27%). Twenty-two per cent suggested a reduction in other responsibilities (e.g. administration, teaching) and the opportunity to receive credit towards a formal certificate or degree (21%), which would seem to motivate men (24%) slightly more than women (18%). Of the specialties, family doctors were the least motivated by this. Finally, there is some incentive if leadership training is viewed positively towards doctors' promotion (19%) or annual review (8%). This also raises questions about what combination of formal and informal leadership development is optimal to prepare doctors for different positions and career stages. Table A3 in the appendix presents these results by job position, Table B3 contains results by gender and age groups, and Table C3 by specialty.

Discussion

Engaging doctors as leaders in hospitals is known to have positive outcomes for patient care and organisational performance [1-5]. The COVID-19 pandemic has pushed medical leadership further up the agenda, and it has also highlighted how leadership training is being used (23). A substantial proportion of Danish doctors who responded to the survey report that they would consider becoming a leader or manager. However, our results also point to the possibility that doctors are not stepping forward because the conditions attached to these positions are viewed as unattractive.

The aim of our study was twofold: to analyse doctors' motivation to lead, specifically, to explore the job characteristics that might act as incentives and disincentives. In addition, we asked doctors what would encourage them to participate in a leadership development programme. Our second aim was to suggest, by demonstrating though this survey, that organisations and countries could engage their doctors and clinicians, through surveys or focus groups, to identify the bottlenecks (in clinical leadership or elsewhere) in their own systems.

This process could also be used to improve diversity, for example to understand further why women often choose to opt out of leadership and what instead might incentivise them in.

Three-quarters of our sample report that the dominant characteristic that would encourage them into leadership and management is the possibility of having a positive impact. The effect was slightly stronger for women and younger doctors. This finding replicates previous qualitative research [18]. However, it was absent from an earlier study of Norwegian doctors and nurses where respondents reported personal motivations of enjoying the power to influence decisions, curiosity, a sense of obligation and increased pressure [20].

The explicit desire to "make a difference", so common among our sample, raises questions about how possible it would actually be for these potential leaders to make improvements that matter to them, in clinical care, across organisations, and health care systems. This expressed desire to have a positive influence somewhat conflicts with the commonly reported disincentives; for example, the concerns reported by doctors about becoming overwhelmed by administration and meetings, having inadequate resources, fearing burnout (more of a concern for women and psychiatrists), and, particularly, a lack of belief in the organisation's willingness to change.

The study's response rate was 17% (3,534 doctors) and it is statistically representative of the population of doctors in Denmark (no statistical differences in age, gender and specialty). To try to protect against self-selection bias, caution was applied in the invitation email to avoid any mention of leadership or management. However, there is always the chance that those who are more active and engaged may be more likely to complete a survey about their workplace. Indeed, these potentially engaged individuals may be the exact same doctors that organisations would choose to target and develop for management roles. Finally, a low response rate does not automatically mean the study results have low validity, they simply indicate a potentially greater risk of this [24].

Many of the identified motivational factors should be interesting to HR/OD managers. For example, the use of pay and conditions. Increased remuneration might compensate doctors (particularly the men) both for doing work considered less interesting (i.e., extra pay is compensation for deviating professionals away from their first love of being a clinician), and for the loss of clinical hours and accrued expertise that would likely raise a clinician's value

(and fees). This also raises an interesting challenge: in many health care systems, including fee-for-services models, taking on more administrative duties often involves a *decrease* in pay for doctors [19]. Respondents, particularly female doctors but not surgeons, also suggest that a job-share might be appealing.

Our findings indicate that simply asking doctors what would incentivise them to consider leadership and management roles can reveal useful information, instead of making assumptions that those who do not actively seek promotion have no interest. We should desire that our best clinicians become leaders because they may act as important role models and standard bearers for future generations. Understanding the incentives can also contribute to the development of strategies that will ease the challenging transition from clinical expert to medical leader [17].

Health mangers may want to consider respondents' attitudes towards their workload. Burnout has become more common even before extra managerial responsibilities are placed on doctors [25]. Stress and fatigue are also likely to worsen because of the COVID-19 pandemic. How, therefore, can organisations adapt their processes and bureaucracy to lessen the administrative burden, a fear expressed by nearly 50% of responding doctors. It would be beneficial if managerial systems could be made less onerous, or employers could include a promise to provide administrative support.

Encouragingly, doctors recognise the need to be trained in leadership and management. Forty per cent of respondents, and every second female doctor, saw leadership training as a pre-requisite and an incentive, as many clinicians feel unprepared for these positions [19, 26]. Personal development was the overwhelming motive, by over 70%, for doctors to undertake leadership training. This interest seems positive, as it signals self-awareness about the need to prepare prior to going into management roles, in a way that is, arguably, somewhat distinct from their clinical or research work. It is unlikely that this response would have scored so highly 50 years ago. Leadership and management development programmes have become much more available to clinicians [21]; however, these results may encourage HR managers, organisational development professionals, and medical schools to further promote appropriate and targeted leadership training.

Of added interest to health managers are the tables A1-3, B1-3, and C1-3 in the supplementary material, which present the results across job position, gender and age, and medical specialty.

These tables facilitate deeper analysis about the motivations of doctors at different career levels, with varied characteristics, working in a range of specialties.

Conclusion

This study, which we believe is the first of its kind, starts a process of thinking. Our sample of 3,534 Danish doctors offers a snapshot reflection about attitudes towards entering leadership and management positions. It also reveals differences in gender, between medical specialties and career levels, highlighting a promising area for future research. We hope these findings are helpful to health managers, HR directors and policymakers in preparing their medical leadership pipeline. This seems especially important at a time when health systems are suffering from the pressures of clinical shortages and burnout [25], Covid-19 and escalating costs and tightening budgets [27].

Too often, senior executives assume that those who work with or for them will adjust to fit the organisation's demands; and in the case of health care, many expect that doctors should heed to the calls to enter leadership and management positions. We suggest that an alternative approach is necessary to increase the supply of willing and capable leaders and managers; it begins by simply asking doctors who are strong clinicians with high leadership potential [5], under what conditions they would be prepared to take on these roles. A next vital step is to provide the requisite development opportunities and support to set medical leaders up for success in these positions [19,21]. Arguably, it is time for health systems to adapt in a way that reflects the incentives and motivations of their staff. After all, "If the mountain will not come to Mohammed, Mohammed must go to the mountain."

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Contributorship Statement

Agnes Bäker planned the study, designed the survey, cleaned and analysed the data, wrote the first draft of the empirical sections and led the revision process. She guarantees the overall content.

Mickael Bech provided translations and explanations of Danish specialties and positions, set up the paper storyline and wrote the first draft of the non-empirical sections including the literature search and literature-related work. He contributed to the finalisation of the initially submitted draft and the revised manuscript.

Jaason Geerts designed the survey parts on incentives and disincentives and leadership development. He contributed to the finalisation of the initially submitted draft and contributed editing to the revised manuscript.

Susanne Maigaard Axelsen provided access to the Danish doctors and input on the survey design. She provided necessary context for the empirical analysis and contributed to the finalisation of the initially submitted draft and the revised manuscript.

Henrik Ullum provided access to the Danish doctors and input on the survey design. He contributed to the finalisation of the initially submitted draft and the revised manuscript.

Marie P. Krabbe planned the study, provided input on the survey design and conducted the survey. She provided input on the storyline of the paper.

Amanda H. Goodall planned the study, designed the survey, set up the paper storyline, finalized the paper from the first draft and managed the submission and revision process. She guarantees the overall content.

b. Funding

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c. Competing interests

None of the authors have any competing interests to declare.

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Table 1: Descriptive statistics for the respondents

	N	Mean	Std. dev.
Age	3,534	49.22	10.98
	N	**Proportion**	
Women	1,760	49.8%	
Position			
Intern/registrar	797	22.6%	
Consultant (low)	420	11.9%	
Consultant (high)	1,260	35.7%	
Head of Unit	202	5.7%	
Executive Director	30	0.9%	
GP (employee)	70	2.0%	
GP (owner)	755	21.4%	
Specialty	**N**	**Proportion**	
Anesthesiology and acute medicine	354	10.0%	
Family medicine	702	19.9%	
Gynecology and obstetrics	180	5.1%	
Medical specialties	847	24.0%	
Pediatrics	155	4.4%	
Psychiatry	266	7.5%	
Service specialties	285	8.1%	
Surgical specialties	700	19.8%	
Other	45	1.3%	

Note: Interns are the Danish "Læge i KBU-uddannelse / Læge i introduktionsstilling", "Regis" refers to registrars (Læge i hoveduddannelsesforløb), "Cons (low)" refers to consultants with limited management responsibilities (Speciallæge ansat som afdelingslæge), "Cons (high)" refers to consultants with high management responsibilities (Speciallæge ansat som overlæge), Head of Unit captures the Danish "Ledende overlæge / klinikchef", "Exec Director" stands for executive director, chief medical officer (Lægelig direktør/cheflæge). Finally, "GP (empl)" refers to those doctors who work at s.o. else's private general practice (Praktiserende speciallæge (almen- eller andre) som ikke ejer egen klinik), whereas "GP (owner)" refers to those who own their general practice (Praktiserende speciallæge (almen- eller andre) som ejer egen klinik). "Medical

specialties” includes the specialties Internal medicine: Nephrology, Internal medicine: Rheumatology, Occupational and environmental medicine, Dermatology and venereology, Internal medicine: Endocrinology, Internal medicine:Geriatrics, Internal medicine: Gastroenterology and hepatology, Internal medicine: Haematology, Internal medicine: Infectious disease, Internal medicine: Cardiology, Internal medicine: Pulmonary, Neurology, Public health medicine, and Clinical oncology. “Psychiatry” includes Psychiatry and Child- and adolescent psychiatry. „Service specialties” includes Diagnostic Radiology, Clinical biochemistry, Clinical pharmacology, Clinical physiology and nuclear medicine, Clinical genetics, Clinical immunology, Clinical microbiology, Pathology, and Forensic Medicine. “Surgical specialties" includes Surgery, Vascular Surgery, Neurosurgery, Ophthalmology, Orthopaedic surgery, Oto-Rhino-Laryngology, Plastic surgery, Cardiothoracic surgery and Urology.

Table 2: Job characteristics and incentives that might lead doctors to say 'yes' to taking on a leadership or management role/position

"A senior clinician manager has asked you to take on a leadership role/position (e.g. team leader, head of department, medical director). What incentives might motivate you to consider this position? (Please tick all that apply)"	**% of Respondents**
The opportunity to have a positive impact on the team, department, or organization	74.5%
Being offered leadership training and support	42.2%
An increase in salary	36.6%
A sense of duty/citizenship	35.2%
Sharing the role with another colleague	23.6%
My positive previous experiences in leadership roles/positions	22.6%
Preventing someone inappropriate from getting the job	22.1%
Reducing other responsibilities (clinical, teaching, research administration, etc)	19.2%
Have become bored with current role(s)	11.9%
Viewed positively towards my promotion	11.9%
My clinical work has become less important to me	7.3%
Viewed positively in my annual review	5.7%

Note: N=3,534. Questions were randomised in the survey.

Table 3: Job characteristics and *dis*incentives that doctors report would lead them to say '<u>no</u>' to taking on a leadership or management role/position

"Why might you turn this leadership offer down- what are the disincentives? (Please tick all that apply)"	**% of Respondents**
It would take focus away from my clinical work/relationships with patients	51.3%
It would mean more administrative work/more meetings	48.6%
It would mean working longer hours / would be too stressful	47.9%
There are not enough resources to support this role	38.8%
Burnout or fear of burnout	35.9%
I feel that the culture of my organization is not conducive to change	25.1%
It would involve conflicts with and having to manage difficult colleagues	22.5%
The pay is not enough	20.2%
I do not have suitable leadership skills or experience	20.2%
I am not senior enough or do not have enough experience	17.1%
Existence of colleagues who are better suited to the role	15.5%
I do not enjoy the responsibility associated with such a position	14.9%
It would take focus away from my research	13.8%
My negative previous experiences in leadership roles/positions	8.3%
It would take focus away from my teaching	6.4%
It will not help me progress in my career	6.0%

Note: N=3,534. Questions were randomised in the survey.

Table 4: Job characteristics and incentives that doctors report may motivate them to take a leadership training programme

"If your institution, or head of department, wanted you to take a leadership training programme, what incentives might motivate you to take one? (Please tick all that apply)"	**% of Respondents**
Personal development	73.7%
Salary increase	35.7%
Extra time for clinical/research work (training hours in lieu)	227.3%
Reducing other responsibilities (clinical, teaching, administration, etc)	22.4%
Receiving credit towards a formal certificate or degree	20.9%
Viewed positively towards my promotion	19.4%
Viewed positively in my annual review	7.6%

Note: N=3,534. Questions were randomised in the survey.